

PATENT

Atty Docket No.: 200209304-1

App. Ser. No.: 10/666,620

**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the foregoing amendments and the following remarks. By virtue of the amendments above, the paragraphs beginning on line 8 of page 2 and ending on line 3 of page 3 of the specification have been amended. Claims 1, 7, 10, 14, 15, and 22 have been amended. Support for the amendments may be found in the original specification at page 19, lines 13-17. Accordingly, claims 1-25 are pending, of which claims 1, 10, 15, and 22 are independent.

Claims 1-25 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6 and 8-25 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Tsuchiya et al. (4,823,111).

Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tsuchiya et al. in view of Kuznetsov (6,021,406).

The rejections of the pending claims are traversed for at least the reasons stated below.

**Claim Rejection Under 35 U.S.C. §112**

Claims 1-25 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Office Action states that the term "close" in claims 1, 10, 15, and 22 is a relative term, which renders the respective claim indefinite. Claim 1, 10, 15, and 22 have been amended to remove the term. Thus, withdrawal of the foregoing rejection is respectfully requested.

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**Claim Rejection Under 35 U.S.C. §102**

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

**Claims 1-6 and 8-25**

Claims 1-6 and 8-25 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Tsuchiya et al. This rejection is respectfully traversed for at least the following reasons.

Amended claim 1 recites a method of maintaining proximity information in an overlay network, wherein the overlay network is a logical representation of a physical network, the method comprising, inter alia, "determining distances of each of a first plurality of nodes in the physical network to each of a second plurality of landmark nodes in the physical network, the first plurality of nodes comprising a first node and the landmark nodes

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being different from the first plurality of nodes" and "transmitting the proximity information to the first node operable to route a message to the region in response to the network condition occurring, wherein the first node obtains the distances of each of the first plurality of nodes to each of the second plurality of landmark nodes."

Tsuchiya et al. fails to teach determining distances of each of a first plurality of nodes in a physical network to each of a second plurality of landmark nodes in the physical network, wherein the first plurality of nodes comprise a first node, and the landmark nodes are different from the first plurality of nodes.

Tsuchiya et al. also fails to teach the first node obtains the distances of each of the first plurality of nodes to each of the second plurality of landmark nodes.

As indicated in the Office Action, Tsuchiya et al. discloses a first level landmark  $LM_{L+1}$  in a hierarchical system of landmarks. According to Tsuchiya et al. at column 8, lines 6-10, if a "topology changes (i.e., nodes and/or links are added or removed), such that a node becomes closer or further from other nodes, the routing function will learn this, and update the routing table accordingly." "Each node that the routing function learns about is a landmark at some level i." Thus, Tsuchiya et al. discloses nodes moving closer or further from other nodes are potentially landmarks if the routing function learns of their movement, and the routing function updates its routing table based on the movement.

However, Tsuchiya et al. fails to teach determining distances of each of a first plurality of nodes in a physical network to each of a second plurality of landmark nodes, wherein the landmark nodes are different from the first plurality of nodes. In particular, while Tsuchiya et al. may teach that a hierarchical maintenance function "receives information directly from other landmarks" (Tsuchiya et al. at column 8, lines 23-26), there is

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no teaching in Tsuchiya et al that a first node of a first plurality of nodes receives distances of another node in the first plurality of nodes to each of the landmarks, where the landmarks are different from the first plurality of nodes. Tsuchiya et al. fails to teach that a non-landmark node receives distances from each of other non-landmark nodes to each of landmarks.

Thus, for at least the foregoing reasons, Tsuchiya et al. fails to teach all of features of independent claim 1 and its dependent claims and thus cannot anticipate these claims. The Examiner is therefore respectfully requested to withdraw the rejection of claim 1 and claims that depend therefrom and to allow these claims.

Independent claims 10, 15, and 22 each recite features similar to those discussed above for claim 1. Thus, for at least the same reasons set forth earlier with respect to claim 1, Tsuchiya et al. fails to teach all of features of independent claims 10, 15, and 22 and their respective dependent claims and thus cannot anticipate these claims. The Examiner is therefore respectfully requested to withdraw the rejection of 10, 15, and 22 and claims that depend therefrom and to allow these claims.

**Claim Rejections Under 35 U.S.C. §103(a)**

Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tsuchiya et al. in view of Kuznetsov (6,021,406). This rejection is respectfully traversed for at least the following reasons.

Claim 7 depends from independent claim 1. As described above, Tsuchiya et al. fails to teach the following features of claim 1: determining distances of each of a first plurality of nodes in a physical network to each of a second plurality of landmark nodes in the physical network, the first plurality of nodes comprising a first node and the landmark nodes being

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different from the first plurality of nodes, and transmitting the proximity information to the first node operable to route a message to the region in response to the network condition occurring, wherein the first node obtains the distances of each of the first plurality of nodes to each of the second plurality of landmark nodes.

Kuznetsov fails to cure the deficiencies of Tsuchiya et al. Thus, for at least the above-discussed reasons, the proposed combination of Tsuchiya et al. and Kuznetsov fails to teach or suggest all of features of claim 7.

Accordingly, it is respectfully submitted that a *prima facie* case of obviousness has not been established under 35 U.S.C. § 103 with respect to claim 7. Accordingly, the Examiner is respectfully requested to withdraw the rejection of claim 7 and to allow claim 7.

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**Conclusion**

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

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By



Jung H. Kim  
Registration No.: 51,299  
(703) 652-3820

Ashok K. Mannava  
Registration No.: 45,301  
(703) 652-3822

MANNAVA & KANG, P.C.  
11240 Waples Mill Road  
Suite 300  
Fairfax, VA 22030  
(703) 865-5150 (facsimile)